

Enzyme	Seed(s)	Taxonomy	E.C.
ATP phosphoribosyltransferase	Q8GSJ1 P00498	3702 4932	2.4.2.17
oribosyl-ATP pyrophosphohydrolase / phosphoribosyl-AMP cyclohydrolase	O82768	3702	3.6.1.31/3.5.4.19
5 proFAR isomerase	P40545 O82782	4932 3702	5.3.1.16
glutamine amidotransferase	P33734 Q9SZ30	4932 3702	2.4.2.-
imidazoleglycerol-phosphate dehydratase	A8MQQ8 P06633	3702 4932	4.2.1.19
histidinol-phosphate aminotransferase	Q949X3 B9DHD3 P07172	3702 3702 4932	2.6.1.9
histidinol-phosphatase	P38635	4932	3.1.3.15
histidinol dehydrogenase	P00815 Q9C5U8	4932 3702	1.1.1.23
3-deoxy-7-phosphoheptulonate synthase	Q9SK84 P32449	3702 4932	2.5.1.54
Pentafunctional AROM polypeptide	P08566	3702	4.2.3.4 / 4.2.1.10/ 1.1.1.25 /2.7.1.71/ 2.5.1.19
3-dehydroquinate synthase	Q8VYV7	3702	4.2.3.4
hydroquinatase I/shikimate 5-dehydrogenase	Q9SQT8	3702	4.2.1.10 / 1.1.1.25
shikimate kinase	A8MRG1	3702	2.7.1.71
3-phosphoshikimate 1-carboxyvinyltransferase	Q9FVP6	3702	2.5.1.19
chorismate synthase	P28777 Q2V4I0	4932 3702	4.2.3.5
chorismate mutase	P32178 Q9C544	4932 3702	5.4.99.5
prephenate dehydratase	P32452	4932	4.2.1.51
aspartate aminotransferase	Q01802 P46646	4932 3702	2.6.1.1
histidinol-phosphate aminotransferase	P07172 Q949X3 B9DHD3	4932 3702 3702	2.6.1.9
aromatic amino acid aminotransferase	P53090 P38840	4932 4932	2.6.1.57
tyrosine aminotransferase	Q9LVY1	3702	2.6.1.5
anthranilate synthase	P00899 Q9FXK1	3702 4932	4.1.3.27
functional indole-3-glycerol phosphate synthase/anthranilate synthase	P00937	3702	4.1.3.27 4.1.1.48
anthranilate phosphoribosyltransferase	Q02166 P07285 Q02166	3702 4932 3702	2.4.2.18
N (5-Phosphoribosyl) anthranilate isomerase	B3H4J9 P00912	3702 4932	4.3.1.24
indole-3-glycerol phosphate synthase	P49572 Q1EBW5	3702 3702	4.1.1.48
tryptophan synthase	Q42529 P00931 P25269 Q0WS13 Q9FFW8	3702 4932 3702 3702 3702	4.2.1.20
acetolactate synthase	P17597 P07342 P25605	3702 4932 4932	2.2.1.6
ketol-acid reductoisomerase	Q05758 P06168	3702 4932	1.1.1.86
dihydroxy-acid dehydratase	P39522 Q9LIR4	4932 3702	4.2.1.9
branched-chain amino acid aminotransferase	Q9M439 B9DHH5 P38991 P47176	3702 3702 4932 4932	2.6.1.42
threonine dehydratase	Q9ZSS6	3702	4.3.1.19

	P00927	4932	
Pyruvate dehydrogenase	O24457 Q8HIY0 Q9C6Z3 P52901 O64688 Q38799	4932 4932 4932 4932 4932 4932	1.2.4.1
2-isopropylmalate synthase	Q9LPR4 Q9C550 P06208	3702 3702 4932	2.3.3.13
3-isopropylmalate dehydratase	P07264 Q94AR8 Q9ZW85	4932 3702 3702	4.2.1.33
3-isopropylmalate dehydrogenase	Q9SA14 P04173	3702 4932	1.1.1.85
homocitrate synthase	Q12122	4932	2.3.3.14
homoaconitate hydratase	P49367	4932	4.2.1.36
homoisocitrate dehydrogenase	P40495	4932	1.1.1.87
aminoadipate-semialdehyde dehydrogenase	P07702 P50113	4932 4932	1.2.1.31
tharopine dehydrogenase (NADP+, L-glutamate forming)	P38999	4932	1.5.1.10
accharopine dehydrogenase (NAD+, L-lysine forming)	P38998	4932	1.5.1.17
aspartate kinase	Q9S702 Q9LYU8 O23653	3702 3702 3702	2.7.2.4
bifunctional aspartokinase/homoserine dehydrogenase	Q9SA18	4932	2.7.2.4/ 1.1.1.3
aspartate-semialdehyde dehydrogenase	Q8VYI4	3702	1.2.1.11
	Q9FVC8 Q0WSN6	3702 3702	4.2.1.52
dihydrodipicolinate synthase	Q9FJ82	3702	1.3.1.26
dihydrodipicolinate reductase	Q93ZN9	3702	2.6.1.83
LL-diaminopimelate aminotransferase	Q9LFG2	3702	5.1.1.7
diaminopimelate epimerase	Q949X7	3702	4.1.1.20
diaminopimelate decarboxylase	P31116	4932	1.1.1.3
homoserine dehydrogenase	P08465	4932	2.3.1.31
homoserine O-acetyltransferase	P55217 P47164	3702 4932	2.5.1.48
cystathionine gamma-synthase	P53780 B9DGA0 P43623	3702 3702 4932	4.4.1.8
cystathionine beta-lyase	Q0WNZ5 P05694	3702 4932	2.1.1.14
5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase	Q8LAX0	3702	2.1.1.10
homocysteine S-methyltransferase	Q93088	9606	2.1.1.5
betaine-homocysteine methyltransferase	Q99707	9606	2.1.1.13
methylnethyltetrahydrofolate--homocysteine methyltransferase	Q42588 Q42538	3702 3702	2.3.1.30
serine O-acetyltransferase	P53206 P06106	4932 4932	2.5.1.47
cysteine synthase A	P31373	4932	4.4.1.1
cystathionine gamma-lyase	Q8L7R2 P17423	3702 4932	2.7.1.39
homoserine kinase	Q9SSP5 P16120	3702 4932	4.2.3.1
threonine synthase	O04130 Q9LT69 O49485 P40054 P40510	3702 3702 3702 4932 4932	1.1.1.95
D-3-phosphoglycerate dehydrogenase	P33330 Q9SHP0 Q96255 Q1EBU1	4932 3702 3702 3702	2.6.1.52
phosphoserine aminotransferase			

phosphoserine phosphatase	O82796 P42941	3702 4932	3.1.3.3
Serine/ threonine dehydratase	P25379 P00927 Q9ZSS6	4932 4932 3702	4.3.1.17 / 4.3.1.19
Serine-glyoxylate / Alanine—glyoxylate / serine-pyruvate transaminases	P43567 Q56YA5	4932 3702	2.6.1.45
glycine hydroxymethyltransferase	Q9LM59 P37292 P37291	3702 4932 4932	2.1.2.1
threonine aldolase	P37303 Q8RXU4	4932 3702	4.1.2.5
glutamate dehydrogenase, NAD-specific	P33327	4932	1.4.1.2
glutamate dehydrogenase, NAD(P)	Q38946 Q43314 Q9S7A0	3702 3702 3702	1.4.1.3
glutamate dehydrogenase, NADP-specific	P39708 P07262 Q9C8I0	4932 4932 3702	1.4.1.4